We Claim:

1. An exhaust-gas cleaning system for an internal-combustion engine having an exhaust-gas stream, comprising:

an engine management system for setting a composition of a mixture in the internal-combustion engine;

a first exhaust-gas sensor for measuring a composition of the exhaust-gas stream of the internal-combustion engine, said first exhaust-gas sensor configured in the exhaust-gas stream of the internal-combustion engine;

a first exhaust-gas cleaning element configured in the exhaust-gas stream of the internal-combustion engine, said first exhaust-gas cleaning element configured downstream from said first exhaust-gas sensor;

a control unit for controlling the composition of the mixture in the internal-combustion engine as a function of the composition of the exhaust-gas stream measured by said first exhaust-gas sensor, said control unit having an input connected to said first exhaust-gas sensor, said control unit having an output connected to said engine management system; and

a second exhaust-gas sensor configured in the exhaust-gas stream of the internal-combustion engine, said second exhaust-gas sensor configured downstream from said first exhaust-gas cleaning element;

said control unit having a control response and a control input for influencing the control response to modify a local balance of an oxygen concentration in said first exhaust-gas cleaning element; and

said control input of said control unit being connected to said second exhaust-gas sensor.

2. The exhaust-gas cleaning system according to claim 1, wherein:

said second exhaust-gas sensor measures the exhaust-gas composition of the exhaust-gas stream of the internal-combustion engine;

said control unit has two I-controllers connected in series, each one of said two I-controllers has a control response; and

said second exhaust-gas sensor is connected to one of said two I-controllers to influence the control response of said one of

said two I-controllers as a function of the exhaust-gas composition measured by said second exhaust-gas sensor.

3. The exhaust-gas cleaning system according to claim 2, comprising:

a second exhaust-gas cleaning element configured in the exhaust-gas stream of the internal-combustion engine, said second exhaust-gas cleaning element configured downstream from said second exhaust-gas sensor.

4. The exhaust-gas cleaning system according to claim 1, comprising:

a second exhaust-gas cleaning element configured in the exhaust-gas stream of the internal-combustion engine, said second exhaust-gas cleaning element configured downstream from said second exhaust-gas sensor.

5. The exhaust-gas cleaning system according to claim 4, wherein said second exhaust-gas cleaning element includes a catalytic converter.

6. The exhaust-gas cleaning system according to claim 5, wherein said first exhaust-gas cleaning element includes a catalytic converter.

7. The exhaust-gas cleaning system according to claim 1, wherein said first exhaust-gas cleaning element includes a catalytic converter.

8. The exhaust-gas cleaning system according to claim 1, wherein said first exhaust-gas sensor is a lambda sensor.

9. The exhaust-gas cleaning system according to claim 8, wherein said second exhaust-gas sensor is a lambda sensor.

10. The exhaust-gas cleaning system according to claim 1, wherein said second exhaust-gas sensor is a lambda sensor.

11. The exhaust-gas cleaning system according to claim 1, wherein said first exhaust-gas sensor is a binary lambda sensor.

12. The exhaust-gas cleaning system according to claim 11, wherein said second exhaust-gas sensor is a binary lambda sensor.

13. The exhaust-gas cleaning system according to claim 1, wherein said second exhaust-gas sensor is a binary lambda sensor.

14. The exhaust-gas cleaning system according to claim 1, wherein said control unit includes a controller selected from the group consisting of a P-controller, an I-controller, a D-controller, and an I^2-controller.

15. The exhaust-gas cleaning system according to claim 1, wherein said control unit includes a P-controller, an I-controller, a D-controller, and an I^2-controller.